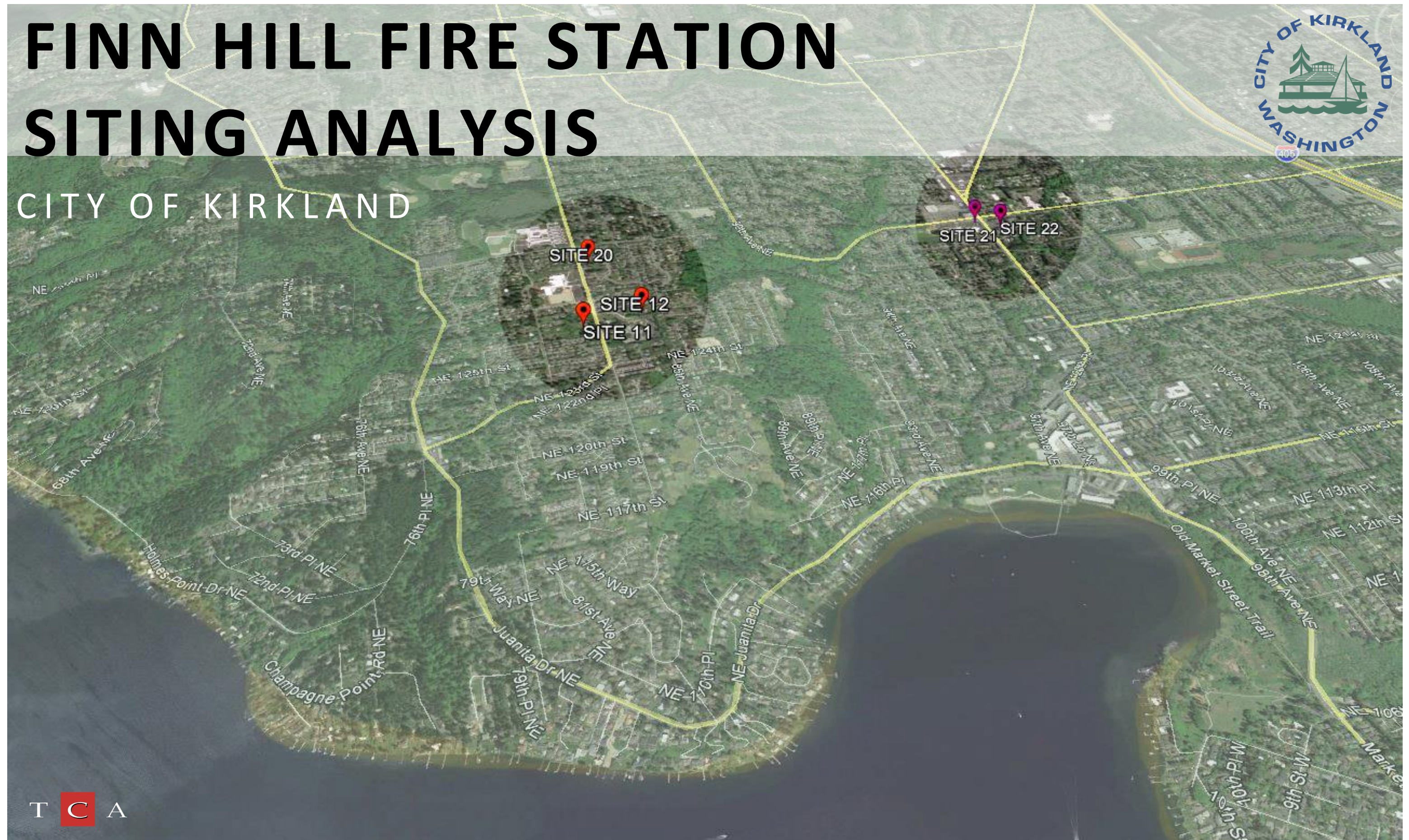


FINN HILL FIRE STATION SITING ANALYSIS

CITY OF KIRKLAND



May 2011

City Council approved Interlocal Agreement (ILA) with Fire District 41 before District was dissolved due to annexation of Finn Hill, Juanita & Kingsgate

- Assets transferred to City of Kirkland
- Responsible for all fire & emergency medical services
- Assumed responsibility for several unfinished programs and projects District Commissioners wanted completed

Project and Programs

- \$70,000 contribution towards Fire Strategic Plan
- Continuation of the Fire Consolidation Project
 - Funded from approximately \$1.2 million District cash reserves
 - \$4 million limited general obligation debt
 - Allows assessor to levy taxes until bond paid off

HISTORY

fire station siting analysis

Interlocal Agreement

- Districts financial assets to be used for benefit of District taxpayers to support fire and emergency medical services
- Retire District debt if consolidation project determined not necessary
- Cash reserves could be available to renovate stations 25 & 27 since both were District stations
- If station 25 & 27 are sold, proceeds can only be applied to reducing debt service on bond

HISTORY

November 2011 Contracted with TCA Architecture Planning
for Finn Hill Fire Station Siting analysis

Objectives

- Engage in public outreach / Listening process
- Develop site evaluation criteria
- Explore single vs. dual station model
- Identify long list of sites & site ranking
- Detailed analysis of short list of sites & findings

HISTORY

fire station siting analysis

February 2012

- Finn Hill Community outreach meeting
 - Status update and discussion of siting process
 - Community feedback
 - Ranking considerations



PROCESS

What was heard

- Provide a transparent public process
- Look at other sites- opposition to Big Finn Hill Park site
- Investigate partnerships- Bothell, Kenmore
- Coordinate “Fire Strategic Plan”

PROCESS

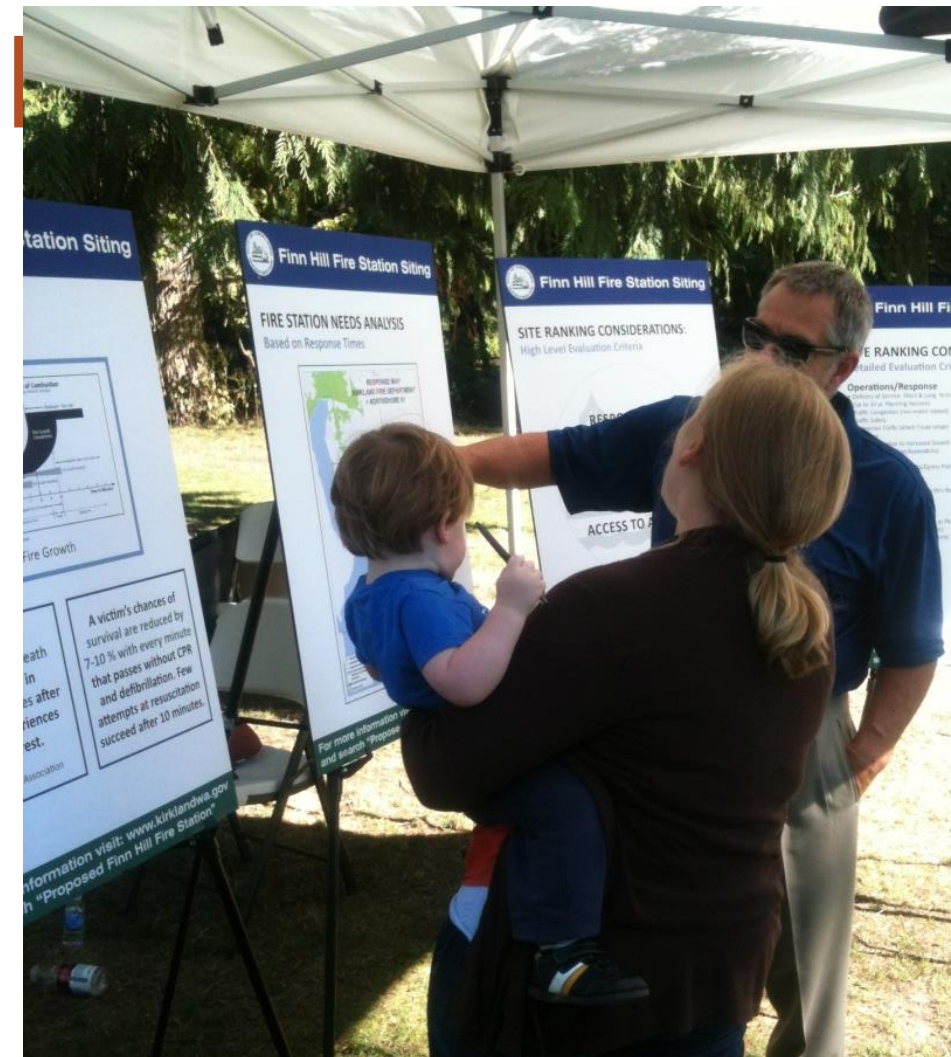
fire station siting analysis

2012 City suspends siting process until completion of:

- Fire Strategic Plan in 2013
 - Identified three response time gaps, including North Finn Hill
 - Station 22, 25 and 27 need replacement in next 10 years
 - Standards of Coverage and Deployment
- Fall of 2013

2013 DennyFest- Recommencement of study

PROCESS



October 2013 Finn Hill Neighborhood Alliance Meeting

- Public Feedback on GIS based response options
 - Status Quo
 - Dual station Model
 - Single station Model



Finn Hill Fire Station Siting

DennyFest 09.08.13

QUESTIONNAIRE

1. Did you attend the Finn Hill Station Siting Open House February 8, 2012?

☐ YES
☐ NO

2. Do you understand why we are doing a Finn Hill Fire Station Siting?

☐ YES
☐ NO

3. What information can we provide you about the siting process?

4. Is siting a new fire station an important topic for you?

☐ VERY
☐ SOMEWHAT
☐ NOT AT ALL
☐ NOT ENOUGH INFORMATION

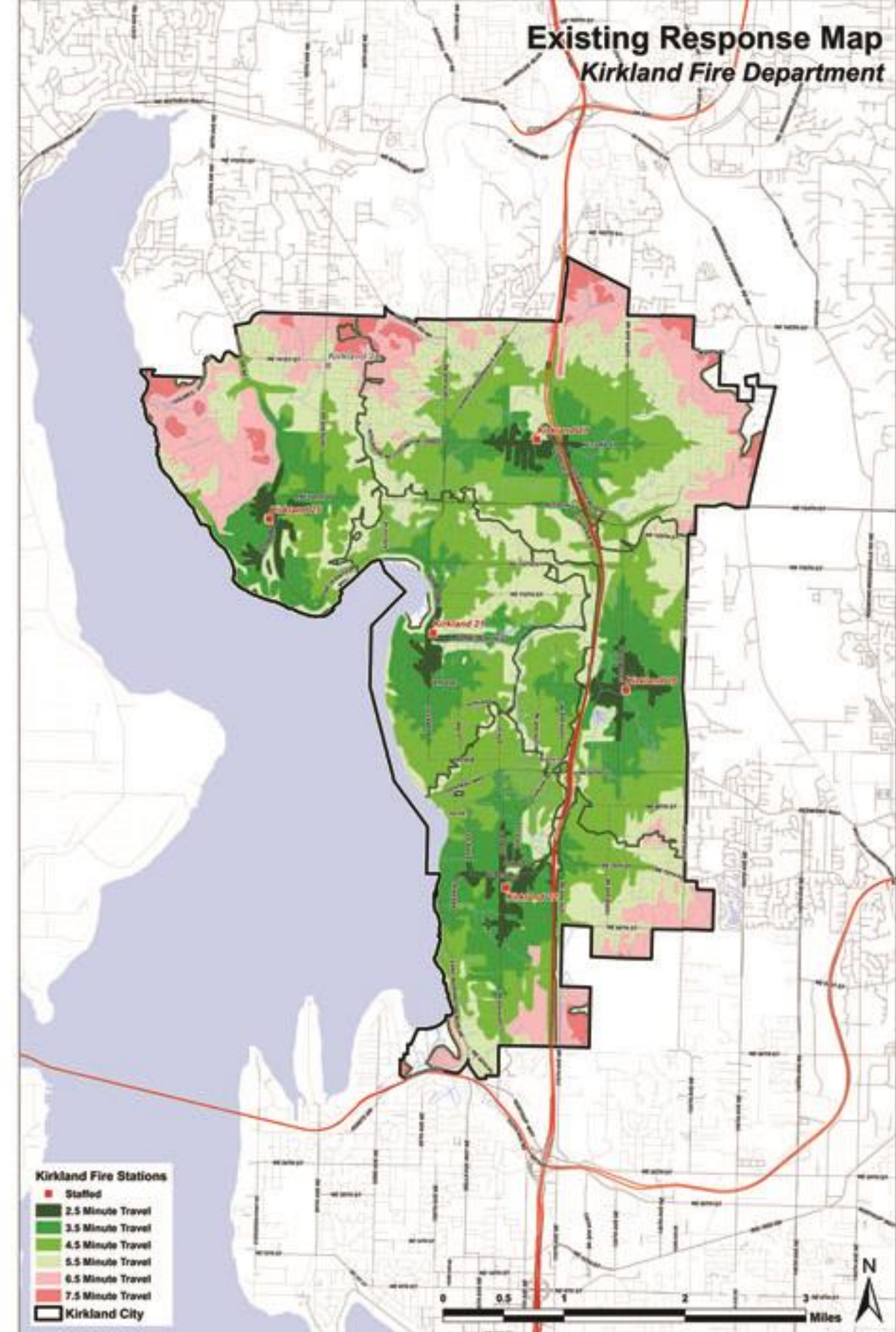
5. What concerns do you have?



PROCESS

GIS based response options

- Status Quo
 - Maintains existing response
 - Upgrade station 25 only

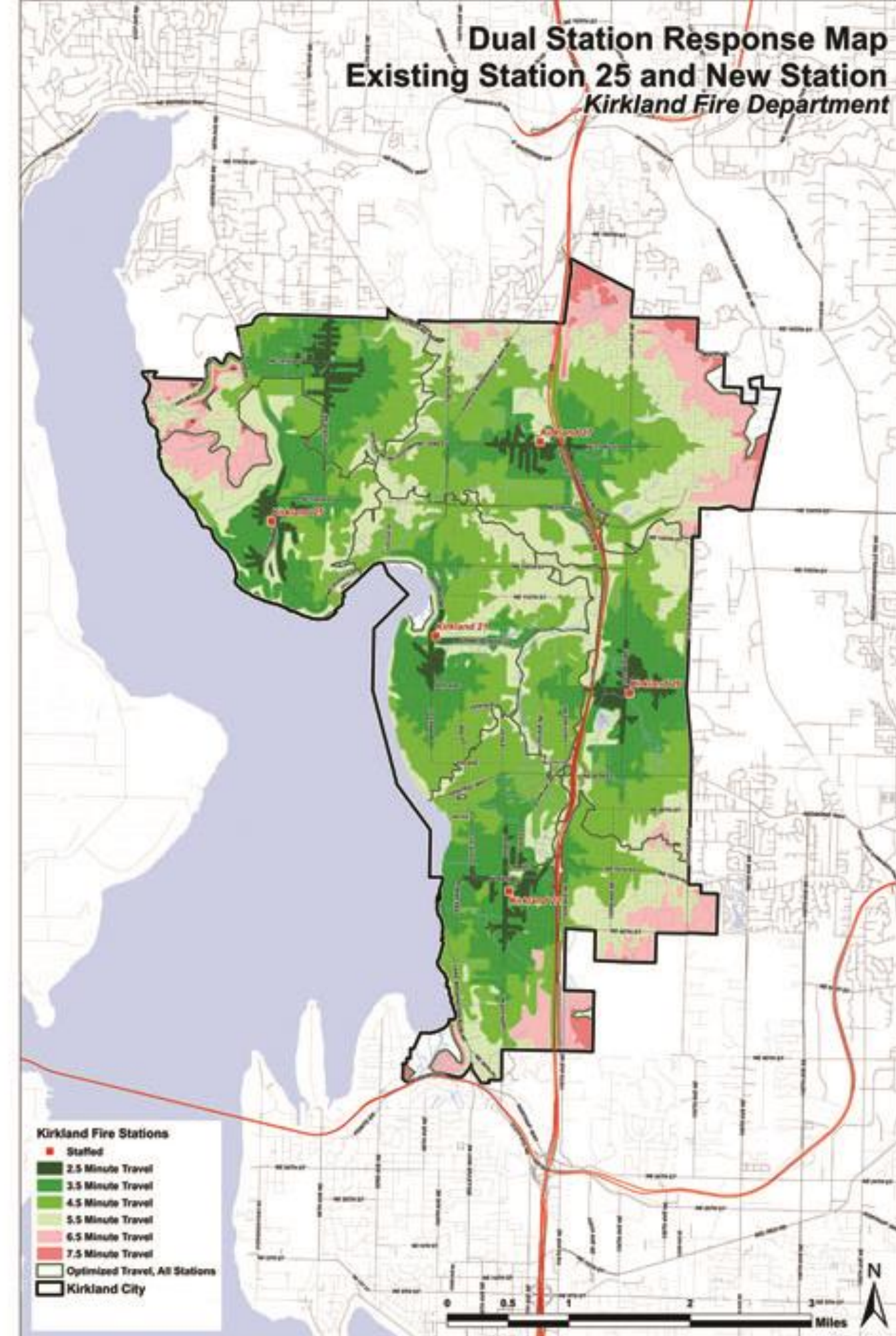


PROCESS

fire station siting analysis

GIS based response options

- Dual station Model
 - Maintains station 25 current location
 - New station in northwest area



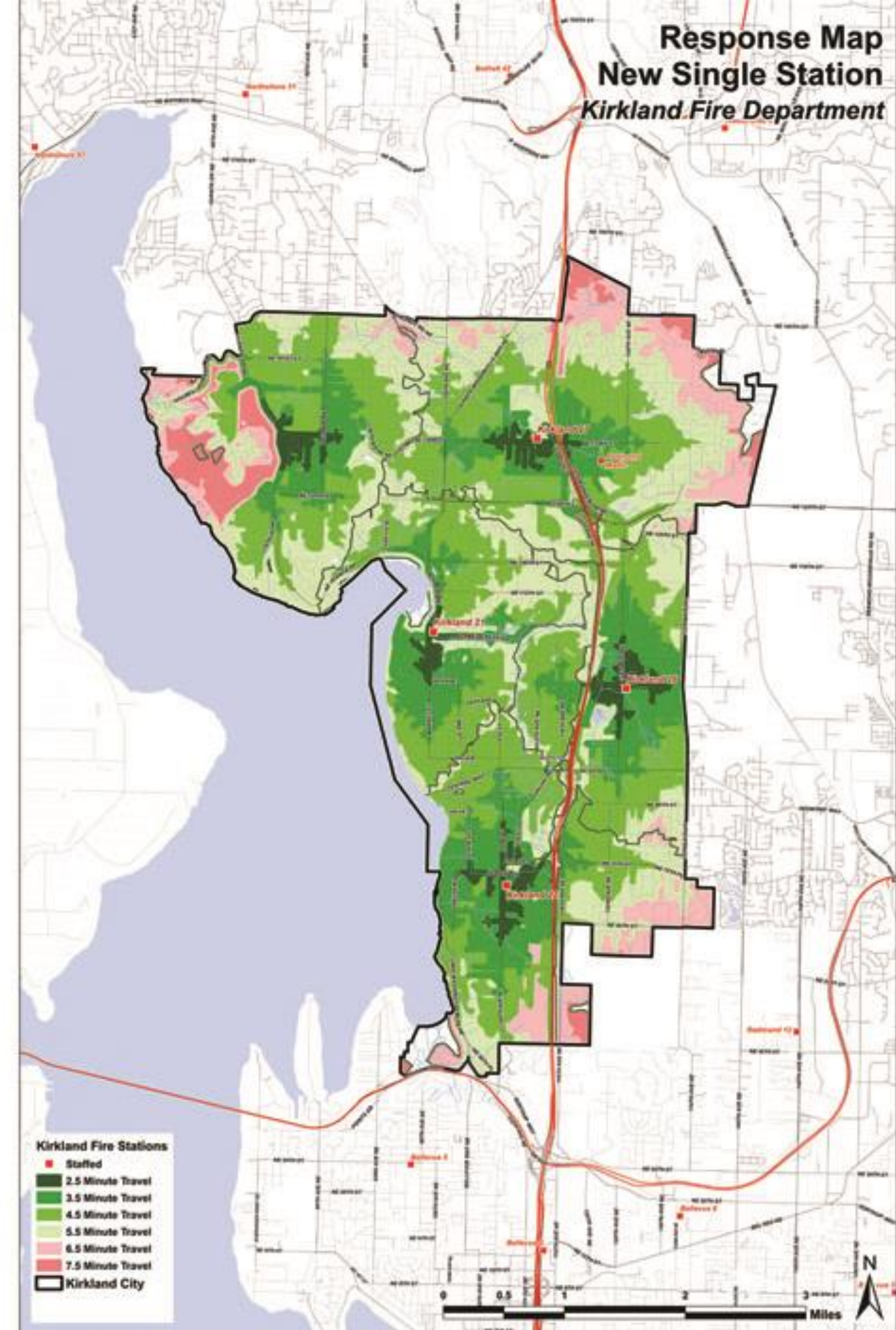
PROCESS

fire station siting analysis

GIS based response options

- Single station Model
 - Relocate station 25
 - Single new station in northwest area

PROCESS



fire station siting analysis



Finn Hill Fire Station Siting



Finn Hill Fire Station Siting

SITE RANKING CONSIDERATIONS:

Detailed Evaluation Criteria

Operations/Response

- Delivery of Service- Short & Long Term (up to 20 yr. Planning Horizon)
- Traffic Congestion (non-event related)
- Traffic Safety
- Pedestrian Traffic Which Could Inhibit Response
- Location Relative to Increased Growth
- Street Configuration/Accessibility Response Related
- Multiple Response Ingress/Egress Points from Site
- Signalization Control
- Ability to Accommodate Drive-thru Bays

Community

- Impact on Local Amenities such as Parks
- Operational Impact (noise, fumes)
- Neighborhood Vulnerability- Seismic Related

Land Use/Code

- Permissible Use
- Property Utilization
- Height Limit
- Parking Accommodation
- Allowable Area
- Allowable Impervious Surface

Environmental

- Habitat
- Wetland
- Park Land

Site

- Dimensions
- Size/ Ability to Accommodate Building Program
- Street Frontage
- Topography
- Street Slope
- Difficulty of Assemblage
- Site Orientation

Design/Construction

- Demolition Requirements
- Groundwater/Soils Issues
- Environmental Remediation Requirements

Financial

- Development Cost
- Site Acquisition Costs
- Project Timeline/Cost Escalation

RANK THE ISSUES:

Rank Which Issues are Most Important to You When Locating a New Fire Station

	NOT AT ALL	SOMEWHAT	VERY
Improved Fire & EMS Service	0	4	30
Park Land Preservation	2	3	22
Neighborhood Impact	0	2	15
Cost of Fire and EMS Service (One Time vs. On-Going)	4	11	7



Finn Hill Fire Station Siting

RANK THE ISSUES:

Rank Which Issues are Most Important to You When Locating a New Fire Station

	NOT AT ALL	SOMEWHAT	VERY
Improved Fire & EMS Service			
Park Land Preservation			
Neighborhood Impact			
Cost of Fire and EMS Service (One Time vs. On-Going)			

For more information visit: www.kirklandwa.gov and search "Proposed Finn Hill Fire Station"

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PROCESS

fire station siting analysis

Site long list

- Numerous sites identified
- Site windshield tour
- Zoning reviews
- High level review

PROCESS

SITE #	ACRES	OWNER	ADDRESS	PHONE	ZONING	PARCEL #	NOTES
2	1.03	Desert Dogs LLC	NE 141st St		RMA 3.6	3579800549	Vacant, Considerable topo
3	1.5+/-	Presbyterian Church + Adjacent	7718 NE 141st		RSA 4	2426049077	Property east of stream and probably unincluding two houses. Stream setback unknown at this time. Sight lines OK
4	0.80	76th PI NE Assembled 4 Houses	7807 NE 141st PI		RSA 6	6599500210, 200, 220, 230	Four houses. Drive through possible with access on NE 141st Place. Sight lines OK
5	1.15+	81st PI to 82nd PI Assembled 6 Houses	14102 81st PI NE		RSA 6	1112700010	Six houses assembled street to street. Sight lines OK. Close to existing station site
6	3.00	Buckner	8421 NE 142nd		RSA 6	6675500230	Large lot with a significant low wetland or lake. Would be a station / park. Close to existing station
7	1.10	Expanded Existing Station	8411 NE 141st St. Facing 84th Ave NE		RSA 6	6675500210	Three assembled houses (or fewer) Well located. Good access and topo
8	Placeholder						
9	Placeholder						
10	1.5 +/-	LW School District LDS Church	7910 132nd St and adjacent		RSA 4	2426049034	Excess school property. Not surplussed. Lease only. Considerable topo and land loss
11	1.74 +/-	Check, Walker, Stump. Large lots S of Sandburg	12637 84th Ave NE		RSA 8	3840700460	Assemble 2 houses. Large lots S of Sandburg Elementary. Reasonably flat. Kirkland land use permit posted
12	1.28 +	O'Dell - Possibly with adjacent church property on 84th	8527NE 127th St		RSA 4	3026059283	House set back behind Vianney Church's N driveway. Would require access reconfiguration. Ample land
13	0.70	Thompson	12520 84th Ave NE		RSA 8	3026059008	Lot fronting 84th in front of the S driveway to Vianney Church. Possibility of additional parking behind if agreement with church
14	.86+	Roach, Richardson	8205 NE 128th St		RSA 6	3840700502, 507	House across from Sandburg Elementary with vacant lot behind. 1.7 Ac if assemble the properties east to 83rd Ct
15	6+/-	Kosalos, Van Engle	Juanita Dr N of NE 133rd PI		RSA 4	2426049033, 9032, 9152,	Low undeveloped property east of Juanita Dr. Stream runs from the NE to SW where it enters a culvert (obscured visual observation)
16	0.75	Lees	12634 Juanita Dr		RSA 8	3840700659, 0720	Property N of Radke. Juanita Drive. Fast moving traffic. Sight lines OK
17	1.2 +	Radke	12622 Juanita Dr		RSA 8	3840700665, 0735, 0658	Various possibilities with Radke properties. Fast moving traffic. Sight lines OK
18	1.56	Sears	12831 Juanita Dr		RSA 4	3840700290	Low property below street grade. Fast moving traffic. Sight lines OK
19	3.5+/-	Radke	12432 Juanita Dr		RSA 8	3840700755, 0758, 0685	Fast moving traffic. Sight lines OK
20	1.53	Seawest Investment LLC	13022084th Ave NE		Rsa 4	3026059189, 9060, 9130	King County land use sign (old) Under contract to a developer according to realtor. Across from Sandburg Elementary
21	0.58	Supervalu	9826NE 132nd St. (Albertsons)		BC 1	192605 9157	Albertson's sub-lease for an additional 16 years. This site will require additional land. Topo is a consideration
22	1.39	Juanita Community Church	10007 NE 132nd St		PR 3.6(2)	292605 9127	Church would move if there were an equal or better alternative. Includes church office house on corner. Topo is a consideration

fire station siting analysis

January 2014- Site ranking committee formed

- Community, FHNA, City Staff, Consultants

Site Selection Criteria

SITE #

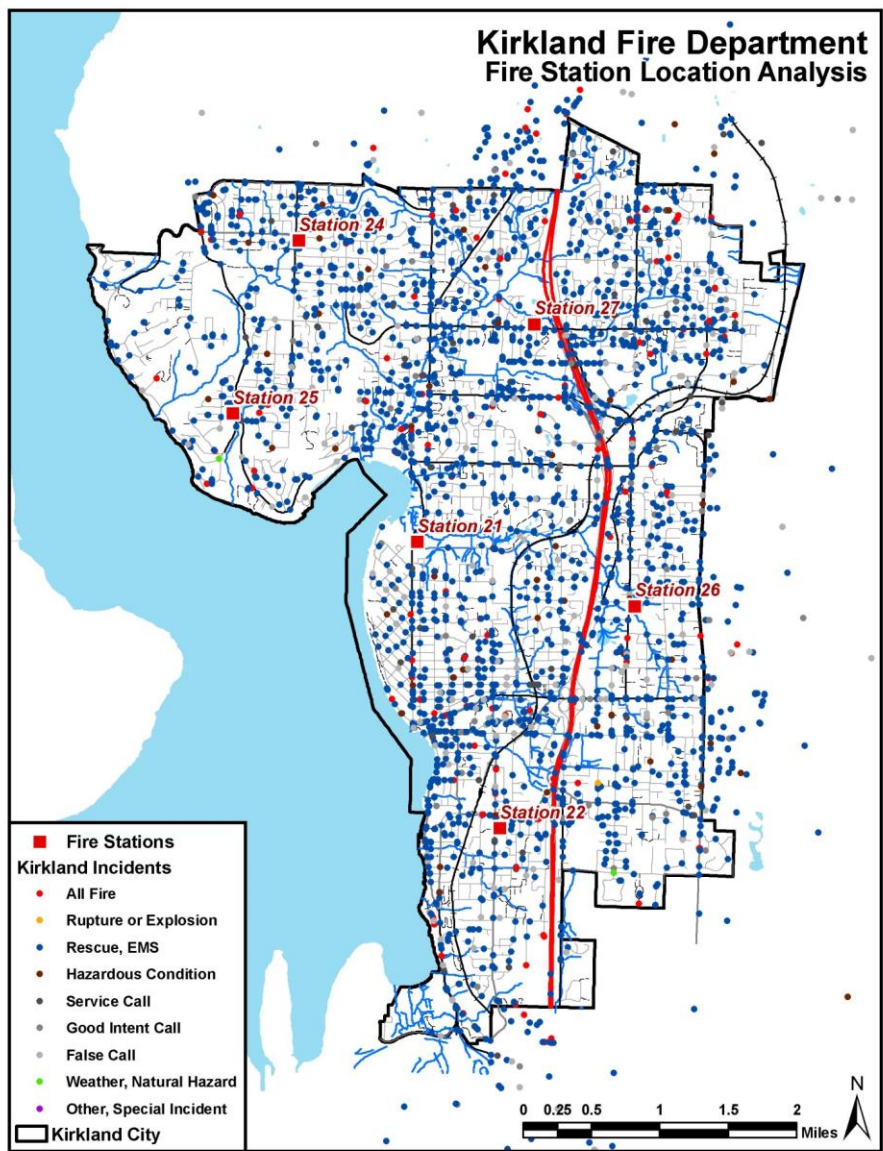
South -20

<u>Criterion</u>	<u>Evaluate 0.0 - 5.0</u>	<u>Weighting %</u>	<u>Overall Rating</u>
* A. Improved Fire & EMS Service	4.70	38.67%	1.82
** B. Low Impact on Owners, Neighborhood	4.00	14.56%	0.58
*** C. Site Physical Characterisites	3.00	17.78%	0.53
**** D. Neighborhood Compatibility	4.00	11.78%	0.47
***** E. Arterial Access, Ingress/Egress	4.30	17.22%	0.74
		100%	<u><u>4.14</u></u> 5 Max

Note: If any Characteristic receives a grade of "0", the site is disqualified from consideration

LEGEND

- * Improvement in terms of Response Timing; Asset Protection,
- ** Consideration of such factors as owner dislocation, renters vs. owners, length of habitation, condition of improvements, percentage of property that is vacant, willing sellers
- *** Topography, size, geometry, utilities, wetlands, etc
- **** Compatibility with adjacent uses, zoning. Mitigation possibilities
- ***** Relative efficiency and safety of ingress and egress. Sight lines



PROCESS

fire station siting analysis

Site short list

- Single station model
- Three sites identified
- Located on 84th Ave NE
- Good north/south response
- Centrally located
- Near Sandburg Elementary

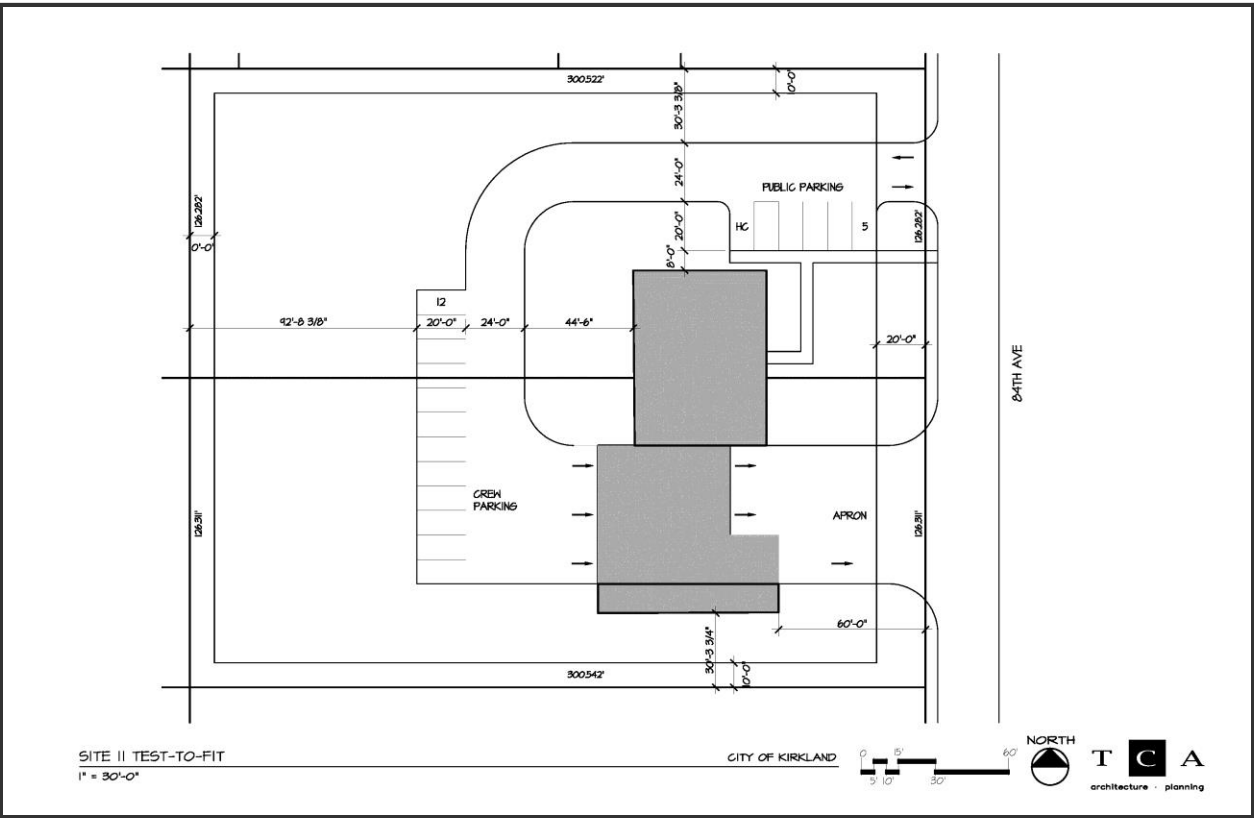


PROCESS

fire station siting analysis

Site 11- Single station model

LOCATION	12637 & 12619 84 th Ave NE	1.74 acres
PARCEL MAKEUP	Comprised of 2 parcels	
STATION RESPONSE MODEL	"Single Station Response" (see page 3)	
DESCRIPTION	Parcels are located south of Sandburg Elementary School	
STATION 2 STORY	(single story at apparatus bay)	
	<div><div>PROS</div><div><ul style="list-style-type: none">• Located well for "Single Station Model"• Located on primary arterial for response• Good site lines• Site controlled by developer• Residential properties on three sides but site allows for substantial buffering.</div><div>CONS</div><div><ul style="list-style-type: none">• Slopes significantly to the west• Extensive retaining required to allow for drive-through bays• Currently being platted for (8) new residential units• Timing of purchase may be problematic due to current redevelopment planning.</div></div>	
SITE DEV/ROW COST	\$2,030,487	
BUILDING COST	\$4,233,730	
LAND ACQUISITION COST	Cost TBD- Approximate fair market value is \$2,800,000 (see page 95)	
* Does not include soft costs which are typically 45-50% of construction costs not including land purchase		

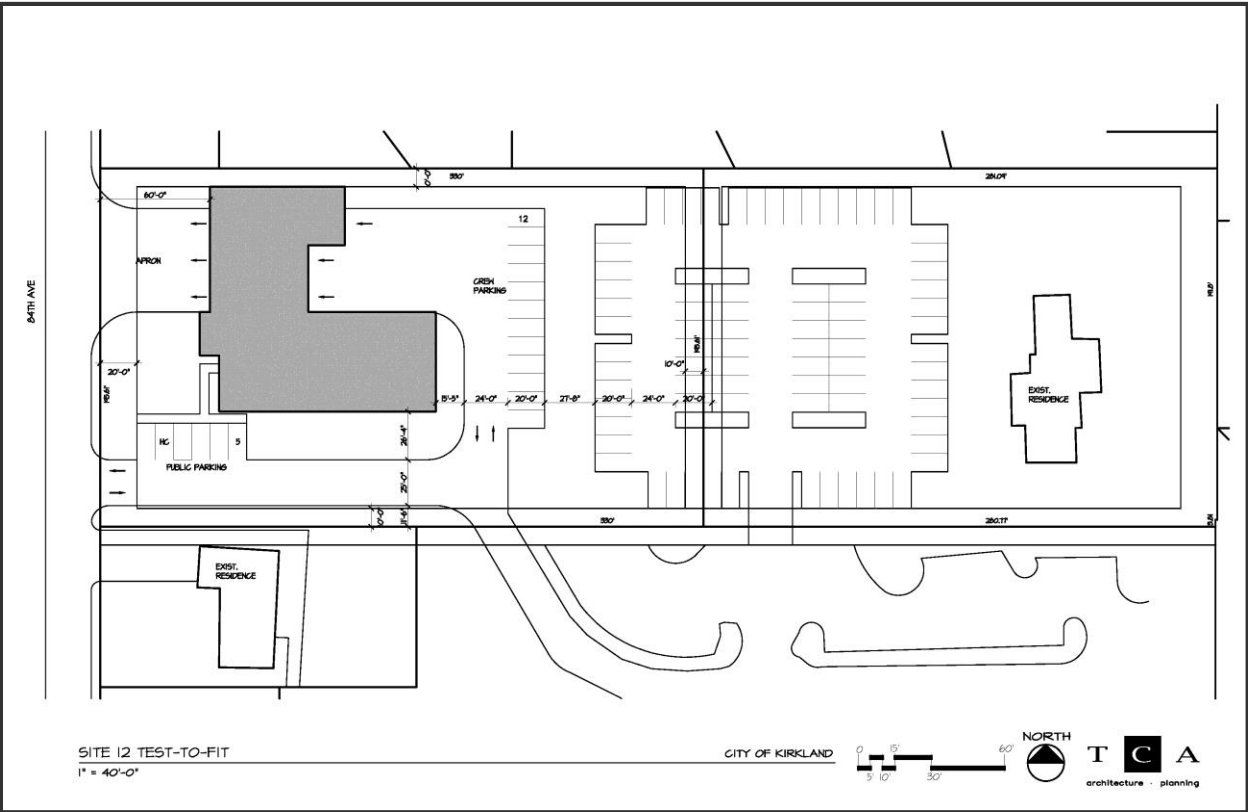


PROCESS

fire station siting analysis

Site 12 - Single station model

LOCATION	8527 NE 127 th St	2.76 acres
PARCEL MAKEUP	Comprised of 2 parcels	
STATION RESPONSE MODEL	"Single Station Model" (see page 3)	
DESCRIPTION	Parcels consist of the Vianney church site access and overflow parking and a single family residence south of Sandburg Elementary School.	
STATION 2 STORY	1 Story throughout with (3) drive-through bays	
	<div><div>PROS</div><div><ul style="list-style-type: none">• Located well for "Single Station Model"• Located on primary arterial for response• Good site lines• Site is relatively flat for development• Residential properties on 2 sides only</div></div> <div><div>CONS</div><div><ul style="list-style-type: none">• Access easement required for church access• Existing church parking would need to be replaced• Traffic congestion could occur during church events and on Sundays</div></div>	
SITE DEV/ROW COST	\$1,719,349	
BUILDING COST	\$3,697,020	
LAND ACQUISITION COST	Cost TBD- Approximate fair market value is \$1,500,000 (see page 95)	
* Does not include soft costs which are typically 45-50% of construction costs not including land purchase		

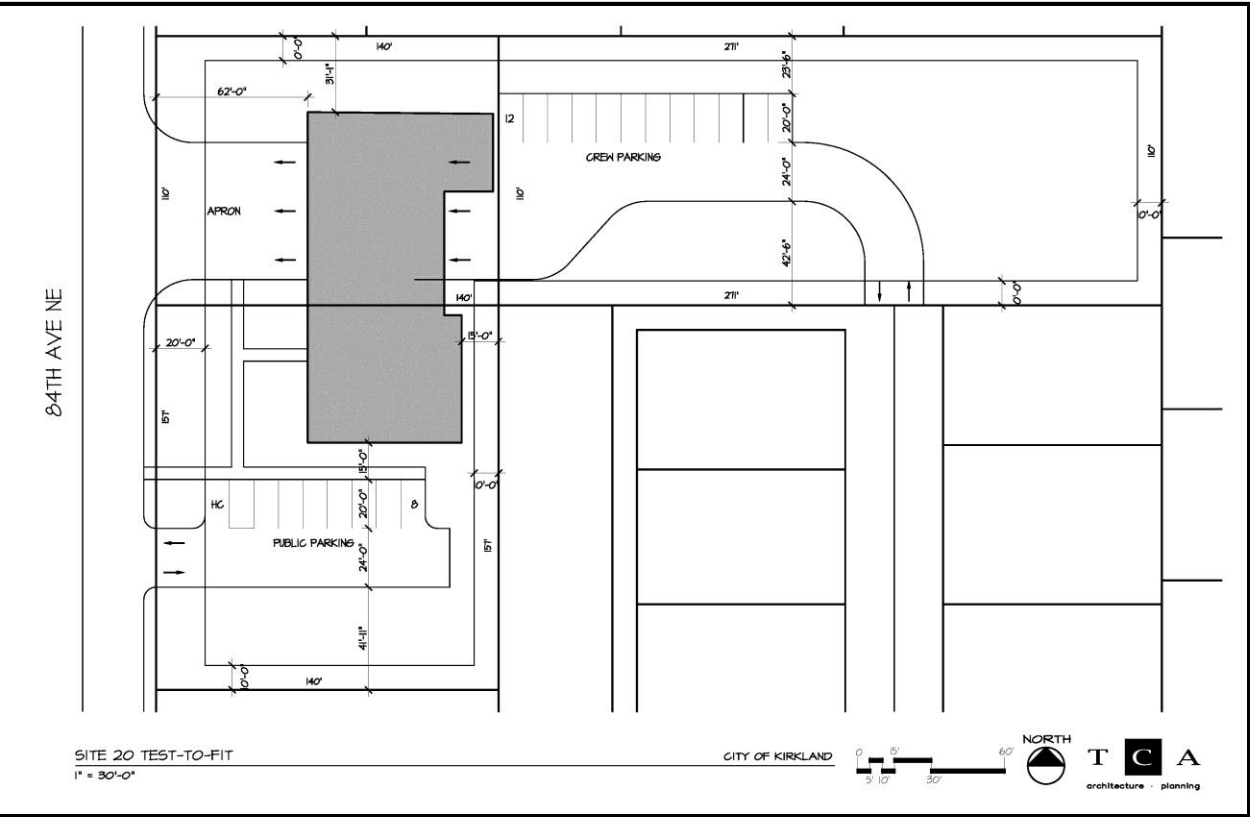


PROCESS

fire station siting analysis

Site 20 - Single station model

LOCATION	13012 and 13022 84 th Ave NE	1.54 acres
PARCEL MAKEUP	Comprised of 3 parcels	
STATION RESPONSE MODEL	"Single Station Model" (see page 3)	
DESCRIPTION	The site is a "L" shape configuration which allows for a drive-through bay and is located across the street from Sandburg Elementary School.	
STATION 2 STORY	2 story crew area, single story at apparatus bays with (3) drive-through bays	
	<div>PROS</div> <ul style="list-style-type: none">• Located well for "Single Station Model"• Located on primary arterial for response• Good site lines• Site is fairly flat• Sites are controlled by a developer <div>CONS</div> <ul style="list-style-type: none">• School traffic congestion may be challenging during certain times of the day• The depth of the parcel on 84th Ave NE is shallow requiring an apparatus return through a neighborhood• The site is surrounded on 3 sides by residential properties and impacts the most residences	
SITE DEV/ROW COST	\$1,423,888	
BUILDING COST	\$4,233,730	
LAND ACQUISITION COST	Cost TBD- Approximate fair market value is \$1,200,000 (see page 95)	
* Does not include soft costs which are typically 45-50% of construction costs not including land purchase		



PROCESS

fire station siting analysis

March 2014 Finn Hill Neighborhood Alliance Meeting

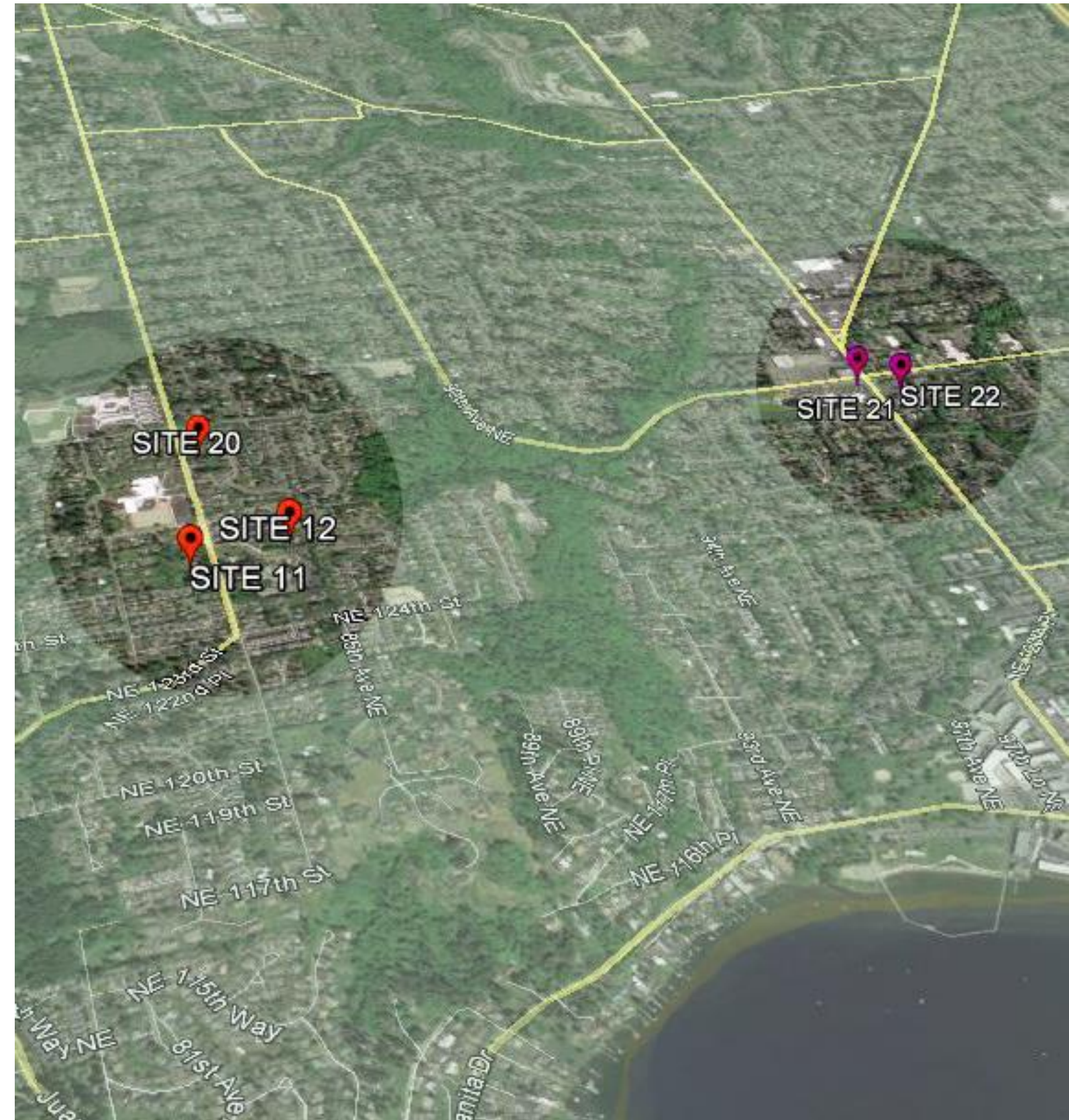
- Fire Chief Nalder provides update on concurrent studies
 - Site ranking committee process
 - Preliminary Standard of Cover Study- identified new station location option and location
 - Two additional sites to be studied
 - Sites 21 & 22 added to short list

PROCESS

fire station siting analysis

Site Short List

- Duel station model
- Two sites identified
- Located on NE 132nd
- Good north/south response
- Good east/west response
- Higher density area

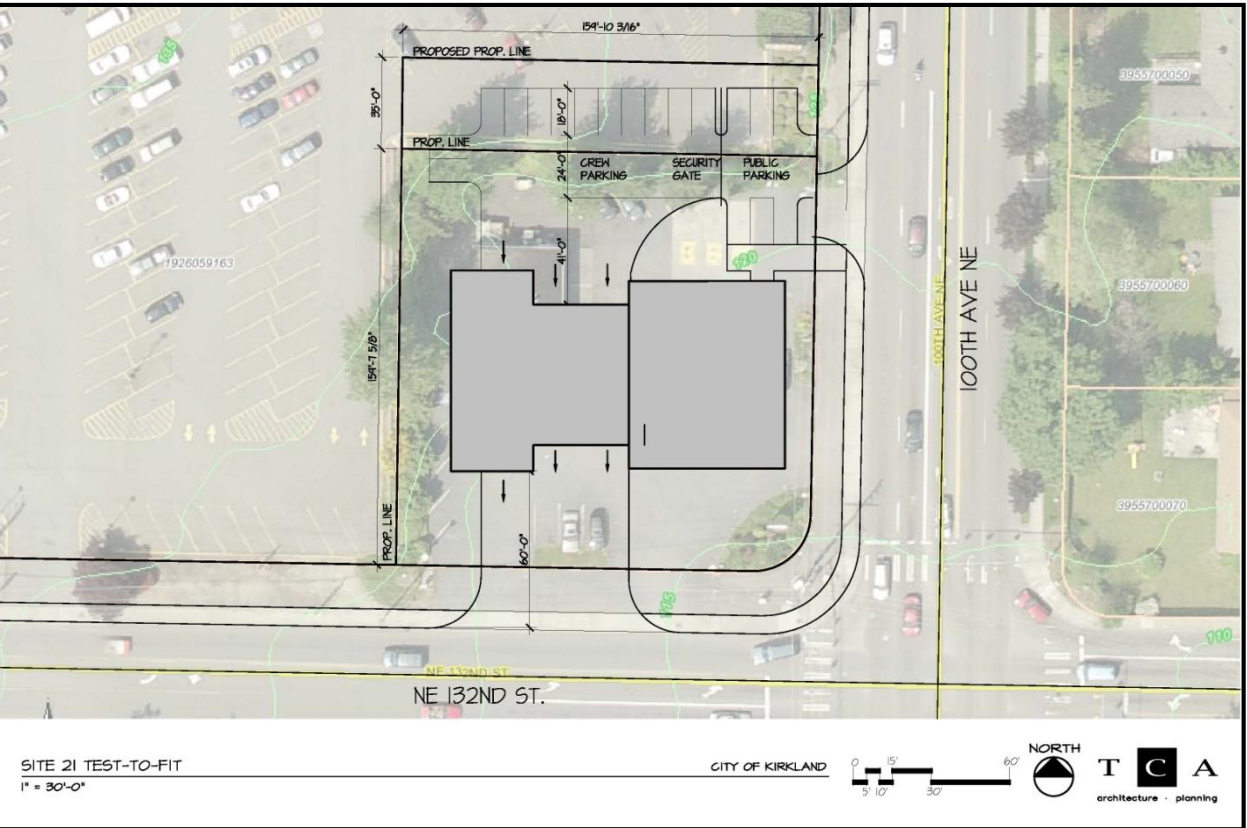
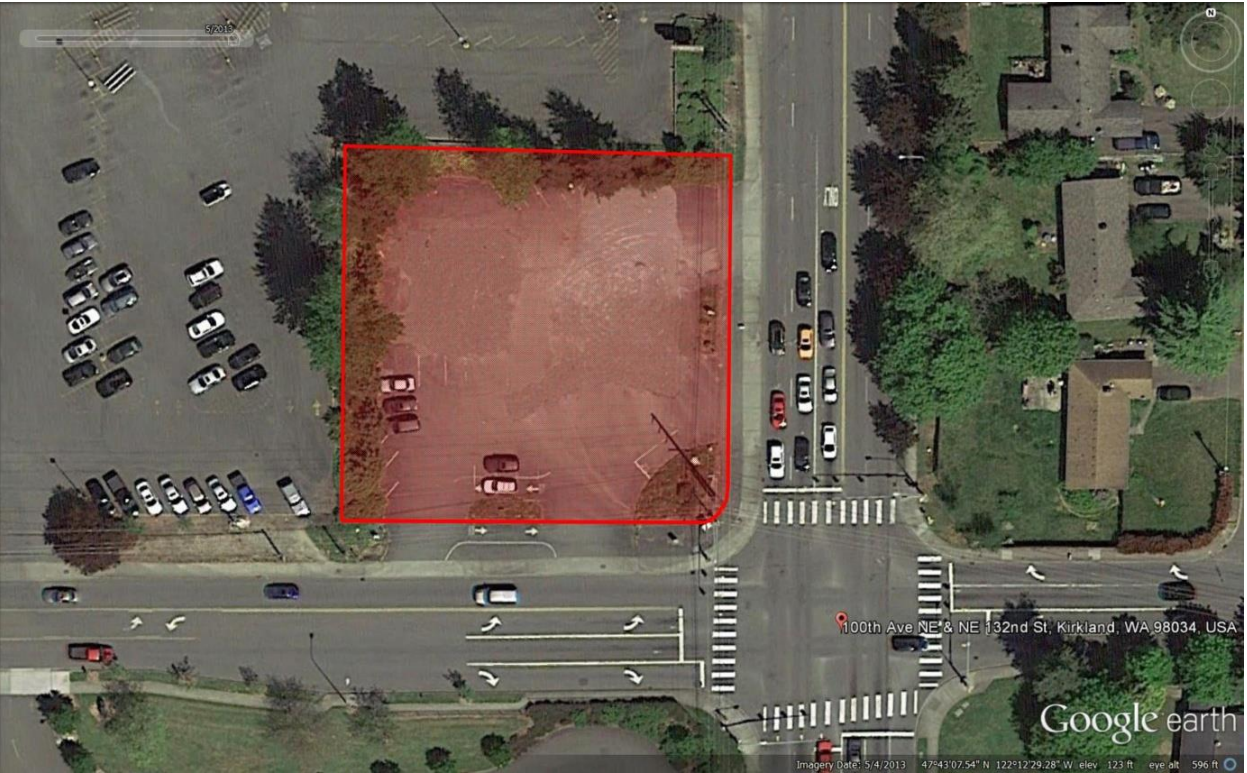


PROCESS

fire station siting analysis

Site 21 - Dual station model

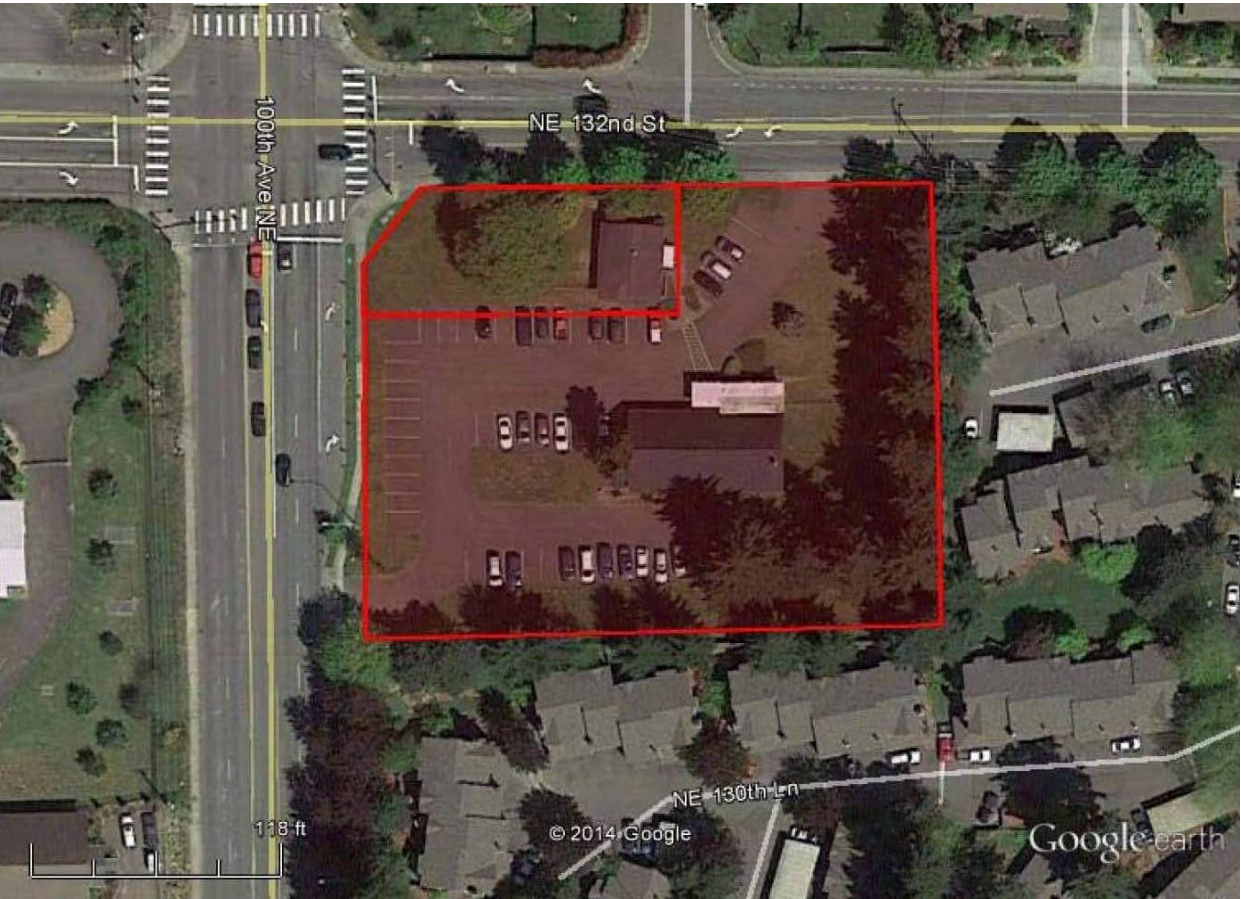
LOCATION	9950 NE 132 nd St	0.58 acres +
PARCEL MAKEUP	Comprised of 1 parcel plus a portion of a parcel to the north is needed	
STATION RESPONSE MODEL	"Dual Station Model" (see page 3)	
DESCRIPTION	Previous gas station location which has been demolished. Site is a corner parcel with retaining to the north and west sides.	
STATION 2 STORY	2 Story crew area, single story at apparatus bays, 3 drive-through bays	
	<div><div>PROS</div><ul style="list-style-type: none">• Located well for "Dual Station Model"• Site does not impact residential neighbors• Site location provides improved response per Standard of Coverage Study• Site has 2 means of egress in and out of site<div>CONS</div><ul style="list-style-type: none">• Environmental studies will need to occur to determine if the soil is contaminated from its previous use• Site is at major intersection, signal preemption may be required</div>	
SITE DEV/ROW COST	\$1,344,338 (soil mediation not included)	
BUILDING COST	\$4,233,730	
LAND ACQUISITION COST	Cost TBD- Approximate fair market value is \$1,200,000 (see page 95)	
* Does not include soft costs which are typically 45-50% of construction costs not including land purchase		



PROCESS

Site 22 - Dual station model

LOCATION	10007 NE 132 St.	1.40 acres
PARCEL MAKEUP	Comprised of 2 parcels	
STATION RESPONSE MODEL	"Dual Station Model" (see page 3)	
DESCRIPTION	The corner parcels have a community church and associated residence	
STATION 2 STORY	2 story crew area, single story at apparatus bays, 3 drive-through bays	
	<div><div>PROS</div><ul style="list-style-type: none">• Located well for "Dual Station Model"• Residences located to south and east however site size allows for significant buffering• Site location provides improved response per Standard of Coverage Study• Site has 2 means of egress in and out of site<div>CONS</div><ul style="list-style-type: none">• Site is not flat- the grade slopes southeast• Due to traffic queueing and turn lanes, the points of ingress and egress will need to be located at the southwest and northeast corners of the site• Site is at a major intersection, signal preemption may be required• Church would need to relocate</div>	
SITE DEV/ROW COST	\$1,532,393	
BUILDING COST	\$4,233,730	
LAND ACQUISITION COST	Cost TBD- Approximate fair market value is \$2,000,000 (see page 95)	
* Does not include soft costs which are typically 45-50% of construction costs not including land purchase		



SITE 22 TEST-TO-FIT
1" = 30'-0"

CITY OF KIRKLAND

0 15 30 60
NORTH

T C A
architecture · planning

PROCESS

Site 11

Building/Site=	\$6,264,217	Total
Acquisition=	\$2,800,000	\$9,064,217

Site 12

Building/Site=	\$5,416,369	Total
Acquisition=	\$1,500,000	\$6,916,369

Site 20

Building/Site=	\$5,657,618	Total
Acquisition=	\$1,200,000	\$6,857,618

Site 21

Building/Site=	\$5,578,068	Total
Acquisition=	\$1,200,000	\$6,778,068

Site 22

Building/Site=	\$5,766,123	Total
Acquisition=	\$2,000,000	\$7,766,123



COSTS

NOTE: DOES NOT INCLUDE SOFT COSTS

Key Challenges

- New Station funding gap of between \$1.6 and \$3.9 million
- Staffing for the Dual Station option

Current Daily Staffing

Station 21 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0

Station 22 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0
Air/Rehab/Lights Unit – 0

Station 24

Aid Unit – 0
2- Volunteer EMT 19:00 to 05:30

Station 25 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0
2013-2014 Temporary Staffing of 4 Firefighters

Station 26 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0
Battalion Chief – 1

Station 27 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0
Ladder Truck- 3
Aid Unit – 0

Total 19

Proposed Daily Staffing

Station 21 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0

Station 22 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0
Air/Rehab/Lights Unit – 0

Station 24 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0

Station 25 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0

Station 26 – Cross Staffed

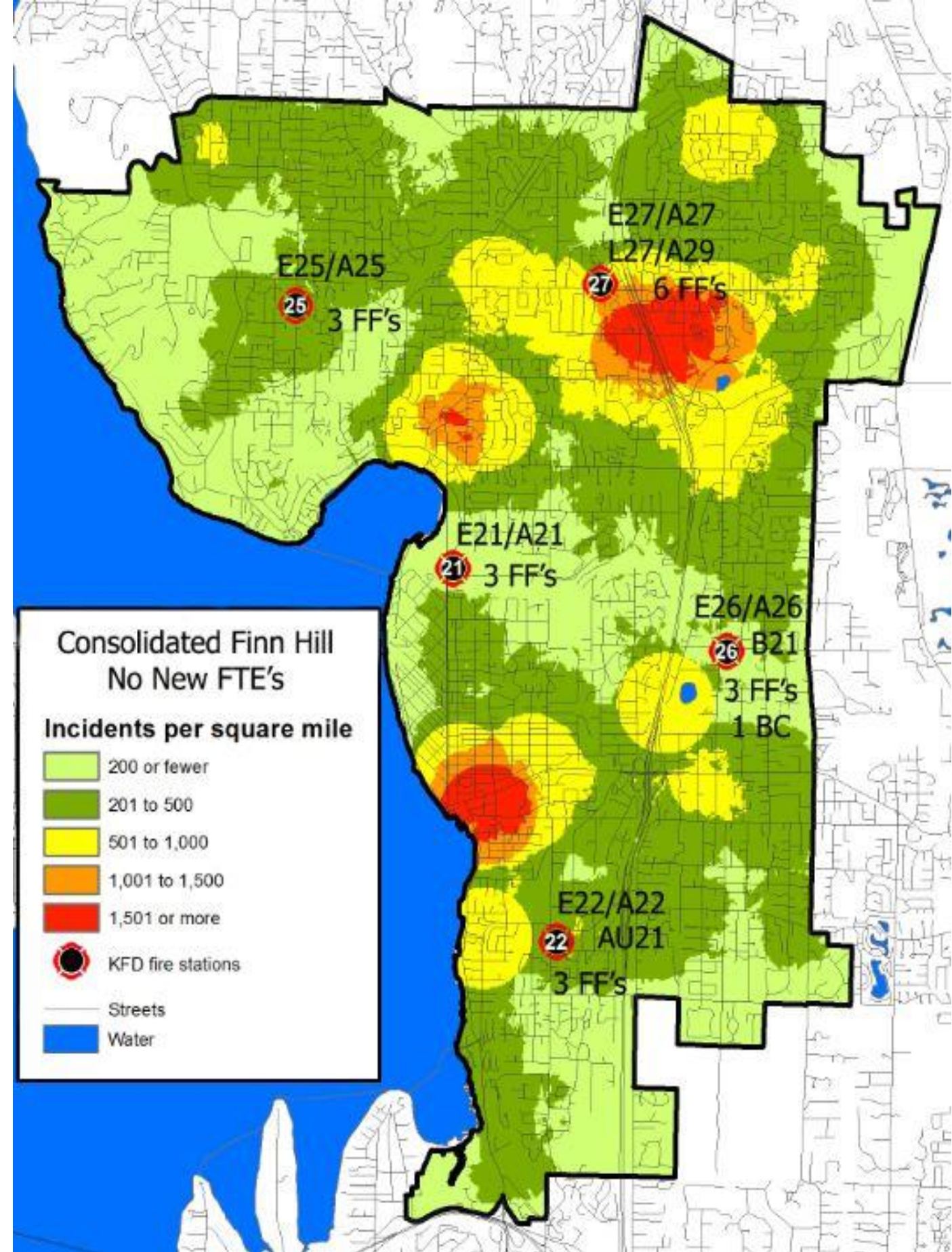
Ladder Truck – 3 Firefighters
Aid Unit – 0
Battalion Chief – 1

Station 27 – Cross Staffed

Engine – 3 Firefighters
Aid Unit – 0

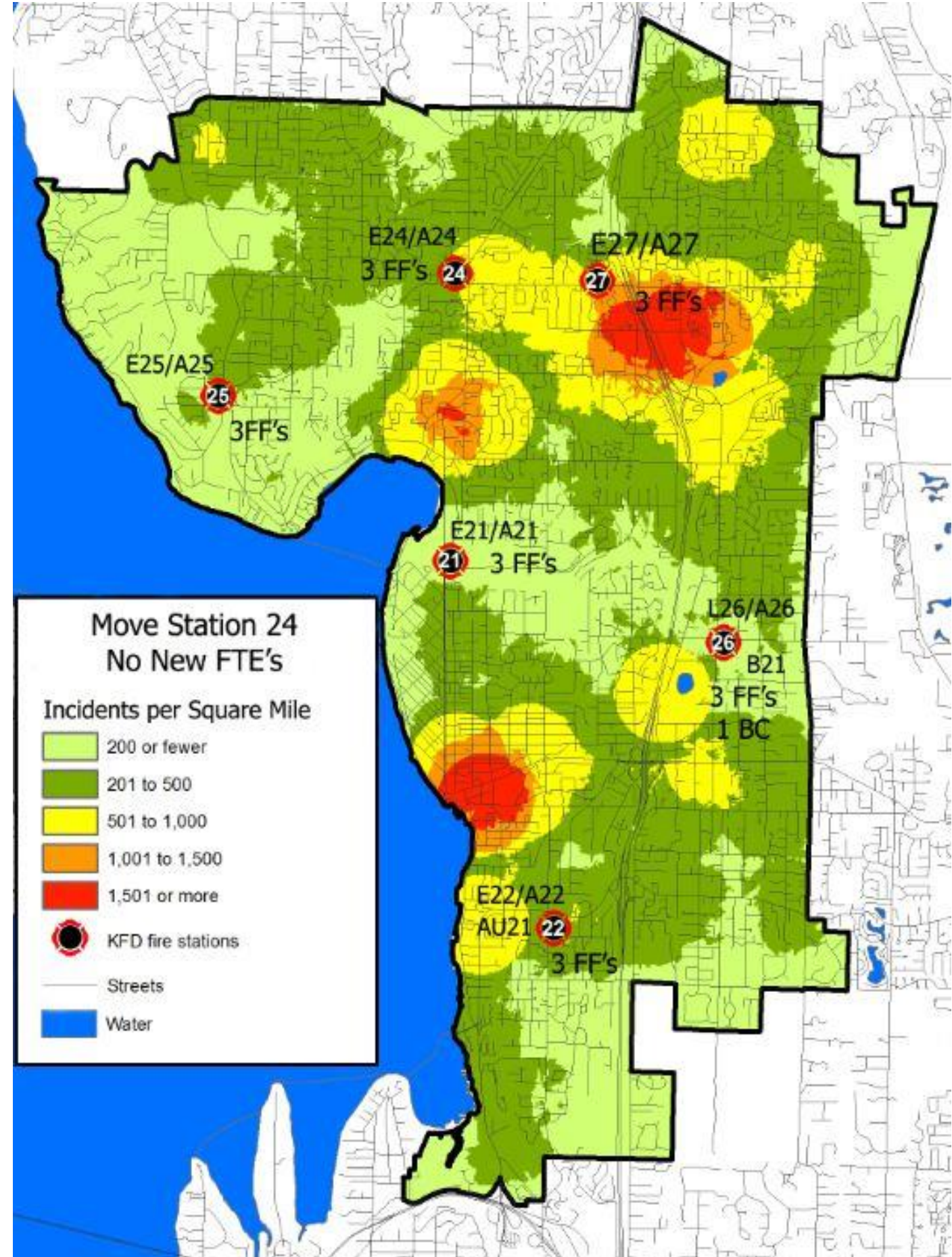
Total 19

CALL VOLUME AND RESPONSE TIMES



fire station siting analysis

CALL VOLUME AND RESPONSE TIMES



fire station siting analysis

Direction Needed

- Station Options
 - Single Station
 - Dual Station
 - Retire Debt- no new station, District balance to renovate 25
- Any additional information to help make decision?